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THE SWISS MILITARY SYSTEM AND ITS ADAPTABILITY TO THE UNITED STATES¹

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THE Swiss Military System is based upon the fundamental principle of obligation for all, and on common sense, uninterrupted effort and the hearty coöperation and approval of the entire nation, combined with and re-enforced by the most intricate and painstaking attention to details. These few characteristics form the basis of the organization of the defensive strength of the Swiss, and they have worked in such a way that when the great test came they met all the expectations which the Swiss people had in them.

The government of the Swiss republic, watchful and aware of the difficulty presented by the Austrian ultimatum to Servia on July 23, 1914, decided upon the most momentous step they had taken in many a decade—the complete mobilization of the national forces. The decree of mobilization was published on August 1st, our national holiday, on which we celebrate in our simple way the anniversary of that first meeting of representatives of the small mountain cantons of Uri, Schwyz and Unterwalden in 1291, for formation of an alliance for the defense of their rights and preservation of their liberties. On this first Saturday of August, 1914, every man up to the age of forty-eight, who had ever had military training and was enrolled in a unit of the army, was called out for Monday morning, August 3rd, at 9 o'clock. Even on the same day the local *landstrum*—that is, the older men not members of any troop in the army, and the youths of sixteen to nineteen, who had undergone rudimentary training with the rifle—were mobilized for the protection of railroad tunnels, bridges, stations, and at once took over these guard duties.

¹ Address at the afternoon meeting of the Academy on May 18, 1916.

On August 2d, the railroads of the country were still open for civilian travel. All the soldiers and officers who lived away from their appointed places of assembling returned to their homes, and on Monday morning at 9 o'clock everybody was at his post. From the distant chalets in the high mountains, from the farms on the creeks and in the level lands, from the factories and work shops, from the houses of the wealthy and the dwellings of the poor, thousands upon thousands poured out to the public places of the little towns or to some meadow in a village where they knew they had to assemble. Each one was armed and equipped, ready from head to foot. At the same time the horses and wagons, which even in peace time in Switzerland are registered for just such an emergency and for nothing else, were brought out, examined and taken over by committees of experts, former cavalry officers and veterinary surgeons, appointed beforehand for that purpose. The supernumerary horses went into horse depots, to be immediately available for use in the army and to replace those used up.

After the assemblage was completed, concentration of the smaller units (battalions of infantry, batteries of artillery, squadrons of cavalry) into larger units (brigades, divisions and army corps) began on the same day. The railroads stopped for civilian travel and transportation, and completed the work of mobilization by carrying to the exposed posts on the frontier, on time tables long before prepared by the general staff, the army fully organized, equipped and officered from the highest command down to the men in the ranks. The work of putting them into a state of defense by building observation towers, digging trenches, executing field fortifications began at once. At some places the building of new roads or the enlarging of old ones was undertaken by the soldiers, obstacles to the defense were removed, at one place even a forest was cut down—all this on plans and orders long before prepared.

In the meantime our powerful neighbors who were to enter the war themselves as belligerents had started their mobilizations also but ours was completed before theirs, and we know

of proclamations posted in parts of southern Germany, where a surprise attack through Swiss territory from France was possible, telling the people that such need not be feared for the Swiss army was quite ready to prevent such a surprise.

The success of the mobilization was thus complete. In forty-eight hours the full strength of the army had been assembled and transported with all the reserves, all the equipment, all the horses, to the full number of three hundred thousand men.¹

This saved the country. Had we not been able to shut the door that led to the neighbors' domain, those neighbors would have had to come in and in self-protection close it against their enemies. It would have been a race between France and Germany as to who would get to Switzerland first. In September, 1912, the German Emperor, with General von Moltke and other members of his General Staff, attended the maneuvers of the Swiss army. These maneuvers, which I had the privilege to follow personally as an officer in civilian state, were on a large scale and were very inspiring. His Majesty, whom I saw at such close range as to hear his voice, was very favorably impressed with the troops, the organization and the leadership. A short time afterward he told "Somebody"—that is some man, woman or child—"somewhere in Europe" that "another route to France would be chosen." That "Somebody"—man, woman or child—repeated the words to "Somebody whom I know" and from whom I have it; it is more than plausible that to the trained eyes of the "War Lord" and his suite the endurance and earnestness of effort and the spirit which animates the Swiss soldiers and officers—to the officers he paid the highly appreciated military compliment of *schneidig* (alert, energetic, spick-and-span)—was an indication of the kind of resistance they would be not only willing but able to offer.

¹ Three hundred thousand is a fairly conservative estimate. The official figures of the government are not known. Some experts claim that the mobilization yielded even larger numbers, some going as high as 425,000. We will have to await the official report of the General Staff after the termination of the war.

In April, 1913, a report of the German General Staff that the Swiss had the will and power successfully to prevent invasion fell into the hands of the French Government. France, too, counted on our readiness, and in this way we have protected both Germany and France from each other, and last but not least, ourselves. The Swiss army, without firing a shot, has attained a victory more brilliant because it was an entirely bloodless one. The Swiss "Army-in-being" did not have to fight; its state of readiness was sufficient.

How was it possible to mobilize in such a short time such an immense army, immense indeed in proportion to the number of inhabitants? It was only possible through obligatory military service for all and through the fact that all ages of men called to arms had received training in the course of time. The Swiss military system is simple and at the same time inexorable. The military resources and the strength and characters of our four neighbors as revealed by past history, the political and governmental ideals and customs of the Swiss nation, and its limited financial resources, made necessary a military system that in its simplest expression should aspire to the following cardinal desiderata:

1. *As large an army in proportion to the number of inhabitants as possible, through universal obligatory service in accordance with the traditions of our forefathers dating back over five hundred years.*

2. *As thorough training as the short time allotted by the will of the nation permits and the financial resources of the country justify.*

3. *Speediest possible mobilization through complete organization and territorial formation of the units.*

4. *Encouragement of all efforts to foster the military spirit in the nation.*

Let us see how it works. When he reaches his nineteenth year the young Swiss is examined for fitness. He has to appear before a committee of experts who travel around to the remotest districts. On a date long before advertised, the young man presents himself. From their earliest youth, the

young Swiss have a goal before their eyes—their nineteenth year. Something occupies their mind and consciousness that does not consist in selfish satisfaction of their own wishes, but which brings before their eyes something honorable, yet at the same time demanding sacrifice in time, effort, fatigue and subordination of their own wills to the will of a qualified and legally appointed superior. This looking-forward to their nineteenth year makes all the boys of the same age somewhat solidary. It creates a collective feeling—not collective in the sense of social class, wealth or education, but collective in the sense of a duty before them which they have to perform together. The same expectations, hopeful and otherwise, permeate their consciousness. They give their thoughts and aspirations something of earnestness which prevents indulgence in thoughtless frivolity.

At the age of twenty the first training or recruit service in which a raw recruit is molded into a full-fledged soldier, begins. The recruits of a district assemble in sufficient numbers to organize a full infantry battalion. The recruiting takes place in barracks and lasts, for the infantry sixty-seven days, including one day of entry and one for dismissal; for the artillery, seventy-seven; for the cavalry, ninety-two, and for the medical corps, sixty-two days. The training is gone through with great energy. In the course of many years, a system has developed which brings out of the men in a minimum of time a maximum of results. No time is lost with unnecessary frills or playful games. The young men are there for one purpose only, and that is to receive military training at the least cost in time to them and money to the state. The reproach made against the regular or standing army of the United States that the soldier's life is one of deadly tedium for lack of sufficient occupation, does not apply to the Swiss soldier or recruit. His time is so fully occupied that he has no time for thought of desertion, and when he leaves the service, he has gone through a school of training that has given him no time to acquire habits of loafing.

The day begins in summer at 5:30, in the cavalry at 3:30; they work until 11:30, then eat and clean up and rest until

1:30, and work again until 5:30. The men receive ample food, and their night rest is long enough for they must be in at nine. Their treatment is good, not harsh. The only criterion is willingness. The young man does not have to be a genius to satisfy his superiors. The requirements are simple, but woe betide the shirk, the laggard, especially him who offers passive resistance and seems a danger of contagion to the others who would do well. He has no easy time, he is made to change his way; his life is not made pleasant for him. But on the other hand to him who shows willingness to do what is asked, or even a little more than is asked of him, reward comes.

The training is practical and thorough and up-to-date. Shooting, marching, outpost duty, entrenching and maneuvering, under day or nighttime conditions, in squads, company and battalion, are practised, together with drill gymnastics, and last but not least, discipline that is the virtue of co-operation with others for a common goal, singly or in masses. The moral training in soldierly honor, and truthfulness is not less important than the acquisition of physical stamina and technical knowledge, and some of this the recruit will take back into civilian life. And what practical lessons in democracy does he not receive? Class distinctions are abolished; all are wearing the same clothing, live in the same rooms, eat the same food. The son of the wealthy and the poor, perhaps for the first time, are on absolutely equal footing; no distinction is made as to their ancestry or social standing. They are put into the ranks according to height, and not according to individual wishes or the whims of mutual attraction. Their military superior may in civilian life be their inferior, but while in service, honor and obedience is due them according to their rank; there are no classes, only grades; no social, only military distinctions.

The military training these men receive has been to many their making. Many a man has been brought out for the first time according to his merit. Those over-estimated at home will be found out. Bashfulness and shame will not go. Many a man comes home with new resolutions. He has formed ac-

quaintances which establish his standing and which he will have to live up to; he has seen the light for the first time as to his duties towards others, and his position in the whole, his importance as an individual, and as a part of the state.

After this original recruit service the young man is a full-fledged soldier, and takes his uniform, his rifle, bayonet, saber and revolver and whatever his equipment is, home with him. In the cavalry even his horse is given to him, and he takes it to his stable on the farm. For only such young men are taken in the cavalry whose fathers or who themselves have stables and facilities to keep a horse. This naturally limits the cavalry to the farmers. This is a distinctive and unique feature, which as far as I know is not found anywhere else. It is based on traditions of centuries, for the Swiss have always been armed and have kept their arms in their own hands. It is an evidence of the great confidence the government has in the individual for the proper care of this valuable and expensive equipment. But the confidence is fully deserved and the quick mobilization, which was possible through the fact that every man was able to present himself fully equipped and armed, justified the measure a thousandfold. The man is personally responsible for the condition of his equipment and annually on a certain day in his immediate neighborhood it is inspected and whatever has not been well taken care of must be replaced at his own expense.

The recruit, on leaving his recruit battalion, is then enrolled into the battalion of his own home district. The Swiss military system is based upon the principle of territoriality; that is, the units are formed of men in a contiguous district. They are assembled in that district where they have grown up or where they are living and which they know thoroughly. Upon his return home he takes off his uniform and after an absence of just sixty-seven days in the infantry, and that is the majority, he takes up again his work or his studies as a civilian, and he is a better man in every respect, physically developed, intellectually more alert, morally with an added sense of responsibility, and spiritually filled with pride over a task well performed.

His duties as the defender of the nation are, however, not over. From now on every year until he is twenty-seven—that is, seven times—he has to serve thirteen days a year with his regiment, in so-called repeat service and in maneuvers. The repeat service is in the smaller units and is devoted mainly to the training of the individual soldier under his immediate subofficer and officer. It alternates every other year with regular maneuvers. These maneuvers are in large units, as large as army corps, and they are so warlike that only the shooting of actual bullets would be required to bring about the dire reality of actual warfare. Long marches, rainy nights spent in deep trenches, outpost duty on high mountain passes and heavy equipment on their shoulders and backs. These maneuvers furnish an opportunity to the commanders and to the administration, and to the staff officers as well as to the railroads to be tested as to their efficiency and readiness. The army in maneuvers have their own bread furnished them from the army bakeries that are erected at the base of supplies in the rear of the army. The meat cattle are slaughtered by army butchers and bread and meat are carried forward to the units on requisitioned wagons, just as in war time. The Staff and commissary officers of each unit must see that their supplies get there in time, for if they do not, the men have nothing to eat, just as in war time. Moving kitchens on wheels follow each unit. In villages occupied the soldiers take shelter in whatever building they need, and the medical corps establishes infirmaries for the troops and hospitals in the rear, just as if on the morrow a big battle were going to take place and thousands of wounded were to pour in upon them. There is nothing except actual war that is more soul-stirring than these maneuvers, which are really annual mobilizations, not complete over the whole extent of the country nor of all age classes, but mobilizations over part of the country, of part of the ages, and while all of the men are not mobilized annually, the material, equipment of units, cannon, supply train and bridge-building supplies are annually taken out of the storehouses and put to the test. If anything is missing or destroyed it at once is replaced or repaired.

Now we come to the training of officers and sub-officers, and as every young man is a recruit in the ranks, all the officers have started their careers from these ranks. Therefore, *an aristocratic corps of officers that had its training away from the ranks in some secluded officers' college does not exist.* It is one of the elements making for democracy in the army and the nation. The young men, who in their recruit service have shown greater interest and talent for executive ability, are asked to become non-commissioned officers and commissioned officers. Great care is taken in their selection, as the acquisition of a grade entails great sacrifice, not only in effort but also in money and chiefly in time, and as acceptance of the call, formerly optional, now is obligatory, no one is asked to assume the burden whose shoulders are unable to carry it. They are selected mainly from among the educated men of Switzerland and among them are found the leading men of every profession and business.

Their career for higher degrees begins at the special training course for corporals. This training course lasts twenty-two days. After this short course the young corporal has to go now as a corporal to a training course for recruits, *and he at once becomes the instructor of the new recruits in a responsible position*, in the same way as in his own recruit course his superiors were his instructors. He learns the practical handling of men at once. After that he serves as a corporal in his home battalion when his home regiment assembles. The future officer, after completing his training as a corporal, goes through a training school for lieutenants, which in the infantry and cavalry lasts eighty-two days, in the artillery and engineer corps one hundred and seven days. There he acquires all the knowledge necessary for a lieutenant,—army organization, map-reading, commanding, hygiene and all the technical military knowledge that is necessary for a young officer. He then returns to a recruit course *where he at once handles and trains young recruits as a lieutenant.* In this way both the officers and sub-officers in the shortest possible time become responsible instructors and leaders of their men. The training might be longer but it certainly is not too long for

these young men to stifle their energy and enthusiasm by too tedious and impractical studies. The sciences and mathematics enter their studies only so far as they are necessary for practical purposes. Probably none of them, after he is through such a course, could build a Panama canal, but then, none of them will ever be asked to do that. On the other hand he is put on his own feet as a practical instructor, moral teacher and military leader of his men, the men he would lead in battle, and is at once held responsible to his superiors for those under him. The leading men in the Swiss army seem to consider now after the experience of the long mobilization that the theoretical training of the young officers is sufficient, that what is needed is still more service with the men, not away from them.

Afterward the young lieutenant, after a total of 241 days of instruction of the most intensive kind, is assigned to some troops, preferably to the home regiment of his neighborhood and district in which he lives. From time to time he has to go to some special course before an advancement. *No one is allowed to attain a higher degree without having passed through service in the lower, and having suitably qualified for the higher.* In the course of years he will become a captain, a major, a lieutenant-colonel and a colonel, and successively command larger and larger units, but *in between his time of service he always enters civilian life again*, just as much as his sub-officers and simple soldiers do; only more frequent and longer periods of service and higher requirements distinguish his duties from those of the rest. He is a civilian most of the time and an officer part of the time. It is only in the higher degrees that the officers have to devote all of their time to their military duties, and where they have to leave civilian life altogether.

The army is divided into three age classes. First, the so-called *elite*, or first line of fighting troops—twelve years, from 20 to 32; second, the so-called *landwehr*—from 33 to 40; third, the *landsturm*—from 41 to 48.

Let us see what is asked of a simple soldier of the Swiss army serving in that branch of the army which always must

be the most numerous—the infantry. At his nineteenth year, he spends one day in physical examination; in his twentieth year, sixty-seven days in recruit service; from his twenty-first to his twenty-seventh year, seven times thirteen days of repeating service and maneuvers—ninety-one days. Hereafter in the *landwehr*, once repeating service—thirteen days—and an annual inspection of clothes and arms, each of one day during the years in which he has no repeating service up to his forty-eighth year—twelve days; that is a grand total of 192 days. In addition, if armed with a rifle, every year he has to practice shooting under the supervision of local shooting societies, which receive a subvention from the government for rifle pits. He has to shoot thirty shots at the target. This is usually done some Sunday morning, takes about two hours of his time all told and interferes in no way whatever with the man's occupation. The full extent of sacrifice in time to the simple soldier, that is the laboring man, the farmer, the school-teacher and the large majority of men in general, is one hundred and ninety-two days—or one-half year—altogether in thirty years and the only really long continuous period of sixty-seven days is in one year, his twentieth, when his responsibilities are light and when as yet he has no family to support. Truly this is not a sacrifice of forbidding magnitude.

What is asked of the man who is not found fit to serve in the army? Does he simply avoid the universal obligation he owes to the country without anything being asked of him? "No," the Swiss say, "if he cannot serve in the army he has to help support it." He is therefore made to pay a small tax, \$1.20 a year for men of small means (this tax during this war time has been doubled), rising with the means, earning capacity and financial standing of the man or his parents; this tax does not yield a large sum; it has been instituted much more to emphasize "a universal obligation". *It goes without saying that only physical unfitness frees from the rank; no influence whatever can interfere with the findings and decisions of the examining committee, either for or against exemption, and no option exists to substitute the military tax for actual service.* This tax is quite a distinctive feature of the Swiss

military system; I hear that it is to be introduced in other countries.

Inseparable from a military force is the cost thereof. The Swiss army not only furnishes the largest possible number of trained, equipped and thoroughly organized men with the quickest mobilization, but it furnishes these at the least cost. For the last few years before the world war the annual cost was about \$6,600,000, that is, \$1.75 per head of the population, and if we divide this sum of \$6,600,000 by the number of men now mobilized, the army of 300,000 men has cost on the average \$22.00 a head a year. This is only possible, of course, because the older men who are included in the 300,000 now ready, have not cost the government anything for many years past, yet they are still there, ready, available and useful, too. This annual budget, of course, does not include such extraordinary expenses, as for instance, an entirely new artillery or fortifications, but it includes the running expenses and the new equipment every man entering the army receives. Compared with the war budget of the United States, we see that last year about \$160,000,000 were spent for the army, yet we could not mobilize in a short time one hundred thousand men. This large sum represents about \$1.50 per head of the population. If we take (1913) Army (\$160,000,000), Navy (\$133,000,000) and Pensions (\$175,000,000), we have a grand total for military purposes of \$468,000,000, that is about \$4.60 per head, and with what small results in actual preparedness!

We have at present the aggregate of 30,000 men and officers of our standing regular army within the confines of the United States proper, mobile and available wherever needed; the rest are in the colonies and immobile at our coast defenses. Reserves for these there are none; in other words the gaps in the ranks through losses in battle and through disease could not be filled except with entirely different material vastly inferior, if at all. Under forty-eight different sovereignties, we have on paper about 129,000 men of the state National Guards, with no uniform standard of efficiency in training and command; of these hardly half, according to the expert

opinion of a former Secretary of War—not more than 60,000—could in any way be counted upon; these 90,000 men at the utmost have never maneuvered together, have never been under a unified command, no commander-in-chief knows them and their material has not been brought together; they are smallest units that would have first to be taken in hand, re-equipped, better trained and officered; co-ordination and co-operation with each other they know not. How long would it take to do that? Would the enemy patiently wait till we are ready? How many of our American generals have ever had the opportunity to lead in warlike maneuvers an army corps of 40,000 men? And what tremendous sums does it not cost to recruit our army? In the year 1913 to 1914 the cost of recruiting alone for every new recruit to the United States army was sixty dollars.

Not only have we no army but we have no military system, deficient equipment, no organization. Our “military system” in the past has been to wait for the emergency and then to begin getting ready.

Just as the “fleet-in-being” of England has saved England without fighting, so the “army-in-being” of the United States would save the United States without fighting. We would not be attacked, because nobody could think of doing so with any chance of success. While we need a navy of a size to command respect and to be able to imperil landings and transports of troops, a sufficiently large army would be less expensive, a better protection and could be organized in a few years under the protection of the world war now going on, while our potential future enemies are occupied elsewhere. We must therefore look to our land forces as that peace insurance that will forever protect our territory from successful invasion and remove the chief attraction for conquest, the combination of wealth and weakness.

In order to do this *it is essential that the army be large enough*. The time of small professional armies is passed now and forever. War in its simplest definition is the supreme effort of nations; and modern conditions and facilities of transportation, the immense and still increasing wealth of

the nations, the diversity and availability of their means of production for the production of war material and last, not least, the spiritual forces of modern times, the energy and strength of national consciousness and cohesion, make war quite a different thing from what it was in the past.

It is of no use to decree by laws on paper an increase in numbers. If men will not enlist, the increase cannot take place and the law becomes futile. There are extremely potent reasons why we may doubt that voluntary enlistments will even fill the ranks of our standing army to 200,000 men: First—on account of the bidding of industry for labor at higher wages, then on account of the tedium and lack of outlook of the professional soldiers' life and finally on account of the stigma attached to service; the soldier feels and is made to feel himself as of minor quality and standing in the community, almost as outside of it; therefore the incredibly numerous desertions, the spreeds and infractions of discipline; and the despicable practise of judges to let men go unpunished if they promise to join the army, make things still worse; can we blame the young man for not wanting to enlist? Obligatory service for all, changes all this at once. The training being of short duration, must be intensive and leaves no time for thoughts of desertion; for the man knows that in a short time he will be in his customary surroundings again, and he will be free to follow his career and pursue his ambitions as before. It will be the natural and honorable thing to be in the army, because it denotes physical fitness, and for the same reason, undesirable to be outside of it; and all classes being represented, it will represent the high average standard of American manhood.

Can the Swiss system of military organization and universal training be applied to the United States, or are we so radically different from the Swiss? Differences of course here are political and economic, but the points of similarity are indefinitely more numerous than the differences. Both countries have a republican form of government and believe in individual rights and in self-government on democratic principles. Both are extremely jealous of their

liberties. The main political differences of the two commonwealths are, that the Swiss people through initiative and referendum, have greater control over the legislative branch of the government, whereas we in the United States through frequent elections are more concerned over the personnel of the executive branch. Otherwise I see no deep-seated difference politically. Temperamentally, the Swiss are rather more serious-minded, probably from racial differences and a more inclement climate and poorer soil, and Switzerland is a country the different parts of which speak different languages. In other respects, the two peoples have very much in common. The size of the country has nothing to do with the introduction of the Swiss military system. Size is merely an incident. The Swiss military system could very well and should be adopted in the United States, not only its underlying principles, but even in detail is this possible and desirable. The principles we must adopt are:

First. *Federal control of the army.* Federal control alone makes uniformity in training, standard of quality and promotion. Forty-eight different state armies would be the death of any effort; the Swiss have tried it and had to give it up. Federal control alone makes possible the formation of the largest army units, divisions and army-corps. Federal control for the last century had to supersede state control in Switzerland, until today it has vanished to a mere shadow.

Second. *Adult manhood service for all. Enrollment and examination for fitness at 18 or 19, first-training service 19 or 20, preferably in barracks, continuous for a few months only, and for a number of years afterwards, annual assembly and tactical maneuvers and brushing-up service of short duration up to a certain age, then entry into a reserve with occasional mobilization similar to those of Switzerland. No reliance on voluntary enlistment or other subterfuges and evasions of the main issue by school boy, college boy, business men's camps and Saturday afternoon rifle clubs. They do not produce soldiers, still less armies, and it is armies we are in need of.*

At present the proposition is made to substitute for service with the army instruction of a quasi-military character in

private academies and to give the pupil credit for this instruction. For two reasons this should be discouraged; first, because it is a class institution; poor parents cannot afford such advantages for their sons and the favors afforded the rich would create a gulf and cause class distinction. The favored ones would look down upon the others and resentment might follow where equality should rule. The other reason is that the training for a soldier can only be adequate under real army conditions and these include in a democracy especially the living, sleeping and working together of all sorts of men; a future officer has to have gone through real, not attenuated, soldiers' duties in order to be an instructor of his men. The "camps", while at present valuable for creating enthusiasm and interest in those who would otherwise have no opportunity to taste military service, have the immense drawback of creating the impression that we are on the right way to preparedness for national defense.

Third. *Adoption of a certain tax for those excused from service for any cause, the tax to be proportionate to the financial means. No possibility of choice between the military tax and personal service.* The tax emphasizes the universal obligation.

Fourth. *Promotion to any grade, only on the principle of having earned it through service in the lower and after having qualified suitably in special courses through sufficient length of service and command for the higher degree. This would mean a final abolition in this country of appointments of men to high command from civilian life through social or political influence.* The science of warfare is so complex and technical that only systematic training from the very ground up will enable the mentally gifted to master it.

Fifth. *Territorial recruiting and organization of units. The country should be subdivided into twenty-five army-corps districts of approximately equal number of inhabitants. The boundaries of these districts to be determined on geographical lines, independent entirely of boundaries of political, state or election districts.* This is quite essential, for nothing could be more detrimental to the interest of the army than the sug-

gestive influence of a coincidence of the boundaries of military and election districts. The call on members of Congress for administrative interference, is burdensome enough as it is, and senators and representatives should be protected from further encroachment on their time and energy; election districts having become military districts, the clamor of constituents would multiply many times and destroy both the usefulness of the congressman and the army; for the army might enter politics or politics invade the army and that would be disastrous for both. These districts should be formed in such a way that mountain ranges, or deep rivers, should not run through them, so that they are to form geographical units for the quickest possible mobilization and concentration. Each district should have barracks, store-houses, all the war material, its maneuvering grounds, and general headquarters at a place chosen for its location, as to railway communications and safety from surprise attacks. Most of our army posts could be retained and either be used as storehouses for additional supplies, remount depots, training posts of the units of special arms, bridge builders, or medical companies, or officers' schools, while still others might be enlarged to the proposed headquarters of the future army-corps districts.

Within these districts of about 4,000,000 inhabitants, the units of the army corps could be recruited, trained and organized. The army-corps district would be subdivided into smaller districts, two or more division districts, each of these into two or more brigade districts, each of these into regimental districts and finally these latter into the last subdivision for the tactical unit—the infantry battalion. Within this battalion district—the men would be recruited for that battalion and in addition for a certain unit of the cavalry—(perhaps one-fourth part of a squadron), for a certain unit of artillery and train troops (perhaps one-fourth or one-half a battery), some part of engineering troops (sappers, bridge-builders, etc.), the necessary medical troops, and supply troops and artisans (bakers, butchers, horse-shoers, wagon-makers, shoe-makers, etc.). On the seashore certain districts would furnish less infantry and cavalry but more artillery for the

coast defenses, for it would not do to recruit these "at large", that is, over the larger district, for the simple reason that quick mobilization would suffer if the coast artillery men had to travel to their post from a distant interior city.

Thirty-six of these battalion districts in an army-corps district would give each a population of about 110,000 inhabitants; of these there would be yearly about a crop of one thousand young men of the age of nineteen or twenty and if we suppose 60 per cent of these to be fit for military duty, it would give each district an annual contingent of about six hundred recruits. Four hundred to five hundred of these would be assigned to the infantry, in the entire army-corps district about 16,000 (the proportion would vary according to changing views on the proportionate number and importance of the various arms.) Should first training or recruit service in the infantry be of two and one-half months duration, that would give four periods, training of four thousand men each time, if they were to be trained all in one place; it is to be expected however that within an army-corps infantry barracks would be in the divisional districts (let us say two in each army-corps district). That would fill each of the two infantry training grounds four times a year with a new set of about two thousand recruits each time. These would be divided into three parts of about seven hundred each, to form a battalion and three battalions would form a regiment. All the officers and subofficers of a regiment would undertake the training, and army life on the basis of a full regiment would be given the recruits, the subofficers and the officers; should there be more training grounds—and probably the solicitude of congressmen would see to it that there would be—a training unit might be a battalion of seven hundred to one thousand men; below the battalion one ought not to go, for both recruits and officers get a better and especially a truer idea of army life in large units. The recruits would be assigned, if possible, to the courses according to their occupations; farmers would be called to the courses in winter when they can be spared on the farms, students in the summer, etc. Nor should the re-

cruits of one locality all go at once, on account of the too great depletion of the workers; as little inconvenience should be caused as the purpose—best training in the shortest time—will permit. After this training service, the recruits would return home and be put on the register of their home battalion with which they would drill and maneuver in the future and they would be civilians again for a year. Their next service is the following year in the fall, after the harvest, when the fields are bare and maneuvers do little or no damage to agriculture. During recruit service, the officers and sub-officers would have their eyes open to discover those that would make likely subofficers and officers. About one-tenth would be so picked, and the same year, or as soon as possible, these would in a short course of say four weeks, be made corporals. This corporals' course would take place either in the same barracks or in some other army post and a unit would again be formed. After this course a test would determine their merit—not too severe and they would all be made corporals; about one-fifth of the more apt pupils in this corporals' course would be asked to become lieutenants. In going home they would be assigned to "corporalcies" in their home battalion. The next year these corporals who had not been asked to become lieutenants would have two services, a recruit-course of two and one-half months as corporal-instructors in a recruit battalion and a maneuver service with their home battalion. Hereafter these corporals would only serve once a year with the battalion, till they go to the reserve. Those corporals however who had been selected to become lieutenants would go to a lieutenants' course of perhaps three months duration and after they had attained a certificate of efficiency, would be assigned to a lieutenancy in their own home battalion, or one of the other ones short of officers. They too would have two services in the following year, one as lieutenant-instructors of a recruit course of two and one-half months and one of two weeks in the fall maneuvers of the battalion in which they would have a command. This battalion would not maneuver alone but with two or three others in a regiment, two regiments forming a brigade, two or three

brigades a division; in addition to the infantry officers and soldiers there would be in every battalion a number of litter carriers and male nurses who take courses from the medical department under their officers, the two doctors; drivers from the train service with the battalion and company ammunition wagons and field kitchen on wheels and the wagons with the entrenching tools; the infantry regiment would have its staff wagons and wagons for the wounded. And the division would be a combination of all the arms, cavalry, artillery, engineers, signal corps, medical corps, field hospital and supply department, with their commanders and their staffs, which all work from the top down, transmitting and coordinating the orders given by the commander of the division. This would be a complete entity standing on its own feet, ready with officers, staffs, men, horses and material (guns, wagons, supplies, bakeries) to take the field. Below the division unit there should be no combination with other arms. And these maneuvers would be not only for the training of the men, they would be just as much, even more a test of the officers and the working together of all units. The two or more divisions of any army corps may maneuver together against an imaginary enemy or against each other as the case may be and as is done in Europe, even in Switzerland. *Not before we have attained this stage of annual mobilizations for peace maneuvers can we say we have an army worth having ready to take the field. We must learn to think in army corps, not men.*

To return to our lieutenant; he would serve as such for some years, then become a first lieutenant and as such, before becoming a captain (at the age of about thirty), he would take a special course for captains, after which, his certificate attained, he would receive a company and advance further, as far as his aptitude, judged by his superiors, will permit him.

The simple soldier after a few years (say eight), would go to the reserves and swells that important body. Reserves are of immense importance; I regret that space does not permit me to dwell on this subject—too little appreciated and understood in America.

It is sufficient to point out, however briefly, the importance of reserve officers; it is said, and probably with truth, that the lack of such in sufficient numbers has played an important rôle and had a detrimental influence on the success of Russian and British arms. It takes longer to train an officer and his training must be thorough, for only in this way will the men in the ranks have sufficient confidence in the wisdom of their leadership and will the officers easily enforce that discipline in their men that balks at nothing. When the lieutenant says to his men: "Now we have to advance to die together, come on boys," they will have to have the discipline born of supreme confidence. Germany, France and Austria seem to have sufficient officers to fill the gaps and their warfare has not failed them on account of a lack of them.

The material should be stored within the army corps or division district complete, so that on mobilization nothing would have to be ordered from Washington or elsewhere, perhaps with the exception of the flying-machines attached to the highest command. All this requires the building of barracks and store houses and the selection of their location.

This is what the territorial organization of the army means and the division of the country in (say twenty-five) districts means. (If less than twenty-five they would become unwieldy.)

Sixth. *Utilization of the officers of the present regular standing army to command the new-formed units of the universal army until the latter can furnish its own lower grades.* The officers of the standing army to be the first to advance to high command. Of course there would be a period of transition which would present a number of difficulties. Units would have to be formed from which qualified officers would first have to be trained: regiments, brigades, divisions, army corps. For these the West-Pointers should be taken from the standing army and be given the command of these new units. These new units of course would not be under arms all the time, only during annual maneuvers. For the rest of the year, the officers of the standing army would return to their commands in the latter. The regular officers and subofficers, and even

some of the privates of the standing army, might be used to help train the recruits of the new universal army. After the first year, the universal army would begin to produce its own non-commissioned officers, and officers, and these would gradually advance until in a few years the whole machinery could be put into thorough working condition. Until that condition will have been attained the present standing army would form chiefly the complicated technical branches, flying corps and the horse services (cavalry, artillery), etc., and also be used for service in our few colonies. The question whether we should give the full equipment to the men and intrust it to their care at home, as the Swiss have done with such success, for almost lightning-like mobilization, is a question of detail.

And what would be the result of the above simple proposition. In the military sense, we would get an annual contingent of about 900,000 young men of the age of nineteen. If we assume that 60 per cent would be fit, we would have an annual crop of about 550,000 men to be given training and to be organized into the national defense forces. It would give us in a few years a few million men, and after we had attained a sufficient number we could then reduce the number of years during which the men could be called out, or increase the standard of bodily fitness in recruiting, give exemption to widows' only sons, etc., and mobilize part of the men for so-called industrial preparedness by securing their services for ammunition factories. We would not lack men.

In a larger sense, we would gain infinitely by such a training. Every man would get physical, moral and intellectual training, which would be a benefit to him outside of purely military considerations. The preparedness of body would make for the preparedness of the soul and the spirit, as it does elsewhere.